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Battle Report for battle 7

Elon Musk Innovator or Fraud?

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1 Introduction

Who was Elon Musk? He was CEO and founder of several companies, whose mission, he declared was “pushing humanity toward a better future”. During the battle we focused on who he was and specifically we had to address the question: “Was he an innovator or a fraud?”. The decision was based on some interviews carried out with him and on historical data. The first team faced the problem of finding proofs, stating that Elon Musk was an entrepreneur and innovator; on the contrary, the second group had to prove he was a fraud: namely, his companies and his efforts were not innovative at all.

The problem both groups faced can be classified as socio-economic and technological. Elon Musk companies’ role covered the first class, as they were central in the realization of his dreams and visions. Since his companies were high-tech (i.e. space expeditions, car manufacturing, solar energy exploitation), the technological aspect was considered in order to take a decision. Regarding his vision, he intended to take humanity to another level through his companies. During the 21st century he was undoubtedly popular, due to the achievements his companies reached. We would like to highlight *how*, without technological effort and investments his dream could not become true. It will be easy to see (in the next pages) that, technology plays a fundamental role in Musk’s life.

The dispute we refer to is rooted into the context of Elon Musk’s life, and the *reality* in which he lived. Both teams had to consider his past, his achievements and his decisions to support their side. The first group had to prove he was an innovator, a person who pushed the society towards a better future. They had to show how his many projects were actual advancements, with a real impact on human race. The second group, on the other hand, had to prove that he was nothing but a fraud, and that its projects were merely a bait to gather money and fame, without any substance or higher purpose.

2 Scenario

Current date, 21/11/40K AD 08:00:00, subject 19 ”Elon Musk” is the last test subject found cryogenic frozen in an abandoned facility from the 21st century. All previous subjects were frozen before him, therefore his deposition is the “closest” to our time. That is why we decided to unfreeze him, to gain information about past human beings, their culture and technological advance. All the information we could gather are dated up to the day subject 19 was frozen, 21/11/2017 AD 15:04:00. Thus, what happened after he was suspended, in this experiment, is unknown. Subject 19, during interviews claimed to be an “entrepreneur”. We must decide whether Elon Musk truly was an innovator or just a fraud. Given this premise, our research team split in two smaller teams, both of them agreed on considering only some aspects of his life as relevant documentation for the final decision. His *financial* situation was a very important topic, since it could provide us an overview of the way he managed his companies. His *personality* was an interesting aspect to consider, as well as

his *studies*. These topics seem helpful in determining how he related to other people and which was the ground knowledge from which he started. Indeed, other important aspects kept in consideration were his *legal concerns*, *technical achievements*, the *environment* and *media coverage*. We took into consideration the first one because, it is about actual facts, which are hardly debatable. The second was deemed important because, it helped us understanding what was the surrounding environment in which Elon Musk could either flourish or perish. The last one was useful to have an insight on what was the public opinion on the character at hand. On the other hand, some aspects were not taken into consideration, as they were thought to be irrelevant for the final result. They are: family, enactment of vision, ethics regarding legal issues.

2.1 Recap and comments about accepted aspects:

- Financial aspects: highlighted his capabilities on being a businessman.
- Legal concerns: highlighted possible irregularities in his modus operandi.
- Personality and previous studies: the former gave us clues about his inclination with respect to problems on his path; the latter, clues about what he deemed to be realistic and feasible.
- Technical achievements and related legal concerns: this showed up to be the core of the discussion.
- Operational environment: highlighted trends and limitations of his time.
- Media coverage: highlighted public response on his achievements and charisma.

2.2 Recap and comments about rejected aspects:

- Family: this aspect is irrelevant to our investigation since we need to consider Musk's achievements alone.
- Enactment of vision: information available to us is up to 21/11/2017 AD 15:04:00; we can not know whether he succeeded or not.
- Ethics: a different civilization and culture; the concept of ethic has changed. Therefore, his actions/choices, which might have been condemned during his lifetime, do not influence his entrepreneurial capabilities.

3 1st View – *Elon Musk was an innovator, entrepreneur and visionary*

Our research group believed that the subject was indeed a great visionary and innovator. Thus, we set off to find facts and proofs to demonstrate it. As a starting point, we decided to take a look at his early years and we found some particularly interesting aspects that show his inborn entrepreneurial streak. We then proceeded carrying out a detailed research on all the major companies he started in his lifetime. We discovered that the subject was a man who could identify the right moment to take the right step in the right direction, and in doing so, he always figured out the next step for humanity to leap into the future. He built and grew enterprises that focused on providing a better life for humans. He disrupted multiple stagnant industries with his attitude towards radical innovation, for that, he was often criticized by those who could not (or did not want to) keep up with the fast changing times on that planet.

3.1 Early Life, Achievements and Pivotal Events

As a first step in understanding Elon Musk, we decided to report the achievement he gained during his life[14]. At the age of 12, he created his first video game and sold it to a video game magazine for \$500. He had two degrees: in Physics and Economics. While he was studying at the University of Pennsylvania, Musk and a friend rented a student house and they used it as an informal night bar to earn money. This was an **early entrepreneurial experiment**. During the “Age of the Internet” boom, Musk dropped out of Stanford to create his own company, **Zip2**. The idea of the startup was to sell city tour guides to magazines like the New York Times. He literally lived in his work place while the startup was growing up. Zip2 was bought by Compaq for \$341M (from which the he earned **\$22M**). He used \$10M of the money he gained from Zip2 to fund **X.com**; an on-line banking company. After a year it merged with another financial startup to start a new company: **PayPal**. He was then nominated CEO of the company, but unfortunately fired after a discussion with other members. Nevertheless, he had the majority of PayPal shares and after the \$1.5B acquisition from eBay he gained **\$165M**. He planned on experimenting interplanetary travel by sending plants and mice to Mars. For such purpose, Musk wanted to buy some dismissed Soviet rockets, but as the Russians sellers wanted \$8M for each rocket, he decided he could create his own rockets for less. In 2002 he founded **SpaceX**, which would later save a lot of money for space launches (up to 10 times less than a normal launch), make re-usable launch systems, and which eventual mission was to make interplanetary travel possible. He then used \$70M in order to fund **Tesla Motors**, a company specialized in electric cars. He co-founded it with Martin Eberhard, who also founded several startups. In 2006, he came up with a new idea: **SolarCity**, a company which produces solar energy to fight global warming. However, he run into several issues: Tesla was struggling to make profit, so he invested \$40M in 2008 to **avoid the company**

to go bankrupt. Then, he was nominated **CEO of Tesla.** 2008 was a catastrophic year for Elon Musk, Tesla was continuously losing money, while SpaceX was having problems launching his rockets. In 2009, he was living thanks to loans. Some good news: SpaceX closed a **contract with NASA** for \$1.5B in order to launch materials into space, and there were new investors for Tesla. At the end of 2015 SpaceX collected 15 successful launches. The subject could not stop bringing new ideas to life: he planned **Hyperloop**, a new fast way of transport that could take you from Las Vegas to San Francisco in just 30 minutes. He also announced **OpenAI**, a non profit company with the purpose of democratizing Artificial Intelligence; avoiding AI taking control over humans. Another project is Autopilot, that will automatically drive cars. His two latest ventures, before being frozen, were **The Boring Company**; a fast and efficient tunnel digging enterprise, and **Neuralink**; a company which aimed to create an interface between a computer and the human brain. The goal was to reduce the affects of neurodegenerative diseases. After uncovering this list of events we decided to dig deeper into his companies, which, according to us, were a tangible evidence of his entrepreneurial mindset.

3.2 Tesla

Tesla motors came with an idea, moving from the traditional oil-oriented cars to more safe, efficient and environmentally friendly cars. As known about Elon, he's a long-term observer, with a very wide vision. His idea of creating cars having all features like traditional ones brought us some added value: a car with no air pollution. After a time of continued loses in the market, Tesla started to reduce the negative income. In other words, Tesla motors started to gain more profit from selling its products [26]. However, after Tesla solved a lot of technical problems[5] and invented related things to electric cars [22], Elon Musk brought them back to life. Nevertheless, many companies which were producing oil-oriented cars followed his idea, they produced many electric cars, then sold on the market, such as BMW, Jaguar, Volkswagen . . . etc [12]. In fact, this is a very good sign, that is, Elon and his idea were successful; he was able to convince the world (including most of the cars manufacturers) that he had an alternative and healthier solution to old-school cars.

Moreover, to prove that Elon Musk was looking for giving something new to humanity and improving the social situation. Tesla Motors decided to make all its owned patents freely available to everybody [17]. This means, any company, research group or/and investors had the authority to use Tesla patents to create something similar or better. For instance, "Speedways Electric", an Indian company is such a great example, they used Tesla's patents to create their own cars, and sell them.

3.3 SpaceX

The strongest point of SpaceX was the rockets' cost: according to the company's website a Falcon 9 launch costs an average of \$62M, which was remarkably less

than what other companies usually charged. Although, the United Launch Alliance did not make its prices public some budget documents show evidence that in 2010, one of their program received \$1.14B for three rockets, with an average of \$380M per launch. According to Defense Department Officials, costs would have risen during time. Elon Musk tried to explain some of the problems that kept prices that high. According to him, many of the problems did lie in the government "cost-plus" contracting system. "If you were sitting at an executive meeting at Boeing and Lockheed and you came up with some brilliant idea to reduce the cost of Atlas or Delta, you'd be fired." he said. Another problem is that other companies bought rocket parts from different manufacturers and every part required a different kind of fuel. SpaceX rockets were built with commonality in mind and they did not only use the same fuel, but they also did fit perfectly one into each other, reducing the amount of tooling and number of processes [2] to be assembled. SpaceX was the company that, according to his vision, would have carried humans to Mars.

3.4 OpenAI and Neuralink

During the second decade of the 21st century, tech giants of that time, such as Google, Apple, Facebook, Microsoft and many more companies started to use and develop artificial intelligence algorithms. Coupled with the technological advance in terms of performance of process units led to an incredible growth in the A.I. field. There were two main types of A.I.: weak and strong. The first one was useful for solving specific task speech analysis and did not adapt to any context outside programming. On the other hand, strong A.I. was more complex, because the A.I. program could adapt and it was more similar to a human mind instead of a one-task robot. Strong A.I. was not feasible yet, however the first step to achieve this technology was "reinforcement learning" (an area of machine learning). Through developing strong A.I. there was the risk of creating a powerful A.I. capable of taking over human race. Elon Musk in an interview, before being suspended said that the chance to surviving a rogue A.I. was between 5% and 10%. In 2015, he founded OpenAI to give the possibility to everyone to know and experiment with reinforcement learning and to increase the development of safe algorithms in a safe and controlled place. OpenAI had an open source platform called OpenAI Gym that hosted users' algorithms and had many custom environments where users could train and test their own algorithms. Similar, but in a different context, Musk founded another company that did put in relation humans and machines: Neuralink. The final goal of this company was to connect people's mind to digital devices, so that they could communicate with others using their minds. It was a newborn company and by that time, one of their objective was also curing neurodegenerative diseases.

3.5 Hyperloop and the Boring company

Hyperloop was an innovative concept of passenger and freight transportation. [24] It consisted in a low pressure tube in which sealed capsules, or pods, were

free to travel at really high speeds thanks to low air drag. The capsule levitated in the tube exploiting a flow of pressurized air, which generated a sort of air cushion, similarly to what happens to an hockey puck when placed on an air hockey table. The pods were magnetically accelerated and decelerated at stations to let people get on and off. The described structure was first introduced by Elon Musk with the white paper of Hyperloop Alpha in August 2013 [11]; the project was developed by a joint team of engineers from Tesla and SpaceX.

Even though Elon Musk did not invest in creating a prototype, the Hyperloop concept was willingly been Open-Sourced by Musk and SpaceX in order to encourage individuals and companies to further develop the system. This not only shows the soundness of Musk's Hyperloop Alpha concept, but also shows, that although the Hyperloop concept is considered by some as a mere utopia, it is valued by many as a radical and disruptive innovation, which has everything it needs to succeed. Even though, building the Hyperloop infrastructure on pylons may be an attractive solution for zones with a low density population rate, it is an unfeasible solution for highly populated areas such as New York City or Washington D.C. In these areas a system of underground tunnels is required, for such reason and for the development of some SpaceX resources Elon Musk founded in 2016 the Boring Company, a company which dug tunnels in a cost efficient way and employed electric machinery instead of petrol fueled ones. In July 2017, Musk claimed that he obtained a verbal government approval to build an underground tunnel infrastructure to connect New York City, Philadelphia, Baltimore, and Washington D.C. with the objective to build the necessary route for an Hyperloop track. In October 2017, the Boring Company obtained a permit to start digging the Baltimore-Washington tunnel from the Maryland's Department of Transportation.

3.6 The future of the human being

Throughout our research we found that the subject had a passion to make human lives better and save mankind. [21] We did some detailed research on the environment of the planet in the year AD-2017 and found some astonishing facts. Humans had polluted the planet more in 60 years than in the past 10,000 years. Carbon dioxide levels were at historic highs. A loss in biosphere integrity was resulting in the extinction of species a hundred times faster than the previous norm. Climate change and global warming were real, and it was evident that the planet was changing at a fast pace: a pace at which humans would not be able to evolve. As seen and mentioned before, the subject was deeply passionate about saving and helping mankind, he was not going to let the human race become extinct. Instead, he wanted humans to become a multi-planetary specie. This was not just some big talk. Musk took big steps and actions to pave the way for this incredible feat to happen. Space-X was working tirelessly on developing bigger fuel tanks, engine testing, perfecting the propulsive landing and development of the vessel that would actually transport humans to Mars. The subject managed to develop a complete transport and architecture plan for the first human settlement on Mars.

4 2nd view – *Elon Musk had a blurred vision of future and uncertain programs*

The aim of our research group was the opposite of the first group: we had to prove that Elon Musk was not an innovator, but a fraud. To support this hypothesis we analyzed Musk’s projects and achievements, to find whether his promises had any foundation. We will go through what he actually achieved, without taking into account expectations and the public image he created, to gather an insight as objective as possible. We could say that Elon Musk was indeed a visionary, but not in the positive sense: he was proposing “cool” and unfeasible technologies to gather attention, to get public support. According to us every single idea is impressive and some of them could have actually work quite well. Subject 19 explained to us, he was planning to couple several achievements gained by his companies, specifically, he stated to have created Tesla Motors to produce low price and highly efficient cars to move on Mar’s surface. He also stated to have worked to the concept of Solar City to gain highly affordable solar energy and planned to use electric motors in electric cars, which will allow to move in an atmosphere where oxygen is absent. Moreover, he declared to have put in motion a company named “The boring company”, whose only purpose was tunnel building. The idea behind this last company was obtaining a sheltered, transportation system under the Martian surface. According to Musk, four different companies combining their services would have achieved his goal. Considering this situation, Musk’s goal seemed to be feasible and rational although, it looked impossible to achieve his vision, considering the limitations of that time.

4.1 Elon Musk’s vision: “Moving to Mars”

Elon Musk is certainly an intriguing and complex test subject, we started considering the society in which he lived many years ago and through many evidences we took a snapshot of his culture. We did so by recovering ancient low capacity electronic archives as well as different primitive media used by past humans to transmit informations. A specific medium Elon Musk often referred to during interviews was used by past humans to get amusement, it was named “comic book”. Subject 19 claims to have taken inspiration from several comic books. We analyzed a fraction of those media and concluded that from his contemporary individuals’ point of view, there were fascinating considerations about his vision. In fact, transferring humans on planet Mars to make mankind an interplanetary species would have been a remarkable result; also making this the last resort in case planet Earth was too polluted to live in, sounded like a good idea. We thought Subject 19 was driven by a desire to put in action and make real a plan that, citing the amusing medium “sounds cool” but suffers some “plot holes”. We detected some irregularities in Elon Musk’s vision, linked to the feasibility of the plan from a practical point of view:

- In case planet Earth was too polluted to live on, mankind would have to

transfer to Mars. *Who would have found salvation on Mars, everybody or just the elite class?*

- We know in 2017 mankind experienced difficulties keeping an individual in a well delimited, sealed space for more than 6 months. *How was he planning to keep human beings sealed inside artificial habitats indefinitely?*
- Human beings evolved on Earth inside a diversified and heterogeneous environment. *How was he planning to rebuild the ecosystem on Mars?*[19]
- We know human race faced the problem of excessive pollution a few decades before Subject 19 was suspended; we also know that, at that time on Earth, several natural cycles (water cycle, forests growth) were active and they helped discourage pollution.[19] We also know that the main solution humans put in action against pollution at that time was the exploitation of them. *If human race successfully moved to Mars and flourishes, how was he planning to manage pollution without taking advantage of such natural cycles?*[19]

Positive answers to the previous questions imply negative answers to others. For instance, in case only elite members of human society moved to Mars, the plan somehow sounded “realistic” and “feasible” because a small portion of 7 billion people would have been sent to another planet. All other aspects were unrealistic, because at the said time mass transportation to Mars was unfeasible, same thing for ecosystem recreation. Moreover, from our point of view Elon Musk’s plan was a mock up of a backup plan to save humanity; especially, because moving to Mars did mean moving temporarily the problem, not solving it. This is probably due to an over accurate inspiration from the comic book. With these considerations, we would like to conclude that, taking inspiration from charismatic figures is good but mashing up several appealing ideas together and pretending to deliver a fully functioning plan is not enough. In fact desiring to reach Mars was an ambitious plan but, we would like to raise a question: “Once humanity reached Mars, how was Musk planning to live on it?” Probably he had no idea about how to achieve this result, otherwise he would have at least mentioned it. In case this claim was true, Musk’s plan was purposeless. Subject 19 was an ambiguous person, meaning, he was trying to couple his interests with the socio-economic landscape, he was trying to exploit several peculiarities residing in the fantasy of people from that time. When we refer to people living at that time we refer mainly to his friends, politicians of governments investing in his companies. Elon Musk exploited the socio-economical landscape using his politicians friends to gather public support for his companies[1].

4.2 Elon Musk’s business

After considering his vision about humanity’s future we would like to focus on his actual achievements in business. According to our research group the main question to answer is “Was he actually fit for business?” Let’s answer the questions by considering his companies:

- **Tesla:** it was his biggest company, whose aim was to bring electric cars to mass production, pushing their development. At the time of his suspension the company was burning through \$8K per minute, without making enough money to be self-sustainable. In fact, according to calculations from experts of the time, he was supposed to run out of money before the end of 2018 [18]. Moreover, all this money was not put to good use, the only product sold was the low-production luxury vehicles: “Model X” and “Model S”. “Model 3”, the first affordable mass production car from the company had a lot of production issues. The Nevada “Megafactory”, built to sustain the Model 3 large production numbers, was struggling to ramp up the production [15]. The schedule for Model 3 deliveries was not keeping up with the hundreds of thousands of reservations [6], delivering just 220 cars by the 2nd of October, instead of the target set to 1600 [25]. Once the company found itself in troubles, to gather money to keep Tesla from running out of cash, Musk unveiled two new vehicles to be released in 2019 and 2020: the Tesla semi-truck and the new Roadster. These vehicles were only in the prototype stage at the launch, but they could already be reserved right after the presentation event with a deposit. These deposits provided Tesla with more disposable cash, without selling any product. Furthermore, at the time of the presentation both vehicles could not be actually produced while keeping the promised features, and there were no guarantees that those would be achieved by the time the vehicles should have been launched [27]. With the decreasing net income and the inability to keep up with their own production plans, the future of the company was looking grim.
- **SpaceX:** It was Musk’s space transport company, of which every project was constantly behind re-schedule. The company promised reusable rockets for space launches, but it did not achieve fully reusable rockets. In 2009 SpaceX won the contract with Orbcomm, but in 2012 SpaceX terminated it. After that event Orbcomm renegotiated the launch contract to penalize any delays by SpaceX. The attempt was successful, in 2016, SpaceX delayed to move ViaSat-2 to space [13].
- **Solar city:** It was a subsidiary of Tesla (acquired on 01/08/2016), focused on Solar energy. This company had a particular pattern, when it ran out of cash and was near failure it was kept alive by Tesla, SpaceX and government’s funds. The New York city government used \$750M of its taxpayers’ money to build a power plant for Solar City, which just had to pay \$1 per year in rent to use it. [29] Solar city had many subsidies and despite that, at 31/12/2016 it had almost \$3.6B of debt[8].

From our point of view, he was just consuming large amounts of money without putting them to good use[18]. His plans and visionary ideas were being postponed constantly, without being completed, emphasizing the fact that Musk was not capable of achieving what he promised and he was only deceiving people.

This could have led to a loss of faith in green technologies, as they could only be seen as a bait that private companies would use to gather funds from

public entities. Denmark was an example of this, as they started cutting down the public funds provided to Tesla, since they observed that without those funds Tesla was not selling any car [23]. This behaviour had two dangerous side effects: wasting public money that could have been used in more productive projects, and creating a bad image for other companies that might have wanted to invest in green technologies using the help of public funds. Considering that some governments do not want see their money wasted, governments would not be as generous they were funding green projects, not only with Musk's. Another problem with Musk's plan for Tesla was that his products were expensive: as such, only a niche of customers could actually afford them, strongly limiting their revolutionary factor. In fact, Germany did not provide funds to Tesla because their product were too expensive, unable to affect the largest part of the population [20]. Furthermore, Musk could not really be defined a radical innovator: most of his ideas were, in fact, just a re-proposition of inventions that were already done. The following projects have been tackled before Musk's companies tried at them, the data regarding this facts were discovered in electronic archives of that time. We came to know that electric cars were invented two centuries before his suspension. They were introduced in the early years of the 19th century, and kept evolving constantly during that whole century [9]. We found out other famous automakers of Musk's time proposed their version of a full electric vehicle, and they were playing a far bigger role than Tesla in this field. The biggest electric car producer was Renault-Nissan, thanks to model "Leaf" [7]. One of the pioneers proposing the idea of traveling to Mars was "Hugh MacColl", in his book "Mr. Stranger's Sealed Packet" dated in 1889, he explores the idea of traveling to Mars. Solar energy exploitation was discovered and put in place by a triad of famous scientists, whose results were saved in historical records, their names were Daryl Chapin, Gerald Pearson, and Calvin Fuller. [4] They proposed an efficient technology to exploit solar energy, this happen before Musk was even born. Also the idea of strong A.I. taking over human race was proposed certainly before him, we found a scientists named "Stephen Hawking" living during Musk's time that saw this very same threat years before him. [3][16] On the other hand, we found nobody else proposing the idea of a reusable rocket so we must acknowledge this result was an innovation. In conclusion, if we consider Elon Musk's vision, we can see he's a junior unexperienced "engineer" trusting anything will just work, which is the exact opposite of an experienced engineer deeming everything to fail.

5 Reconciliation

After the discussion, both groups acquired new insights on the opposite point of view about Elon Musk and after a meeting they came to an agreement upon the fact that Elon Musk resembles the part of an innovator. Indeed, he created real companies with a futuristic mindset: sending humans to Mars. His ideas and ventures in fact were innovative. We also agreed upon the driving purpose behind his ideas: the survival of humankind making it an interplanetary species. This is the point where a trade off must be achieved, despite Musk gave no clue about *how* to live on Mars in case humanity moved there, a counter argumentation can point out “knowing how to live there is useless in case one can not reach it”. This is why (despite he gave no clue about the last part of his plan) we must acknowledge his effort is meaningful. While many in that time believed him to be a great entrepreneur and supported him, he faced a lot of criticism for his unconventional ideas as well. Opinions of these critiques and skeptics made him look like a fraud. Most of his promises were ahead of his time and seemingly unfeasible, and contributed to worsen his reputation. This could have been a reason why some of his products were unsuccessful and did not meet the expectations of consumers. However, what emerges from our analysis, is that he cared about humankind, and that he was trying to do his best to lay down the foundation for a better future. We categorized the subject into three major brackets in order to reach a harmonization of both our view points; his innovative mindset, the success of his companies and their financial state and his ideas. Follows a detailed analysis on each aspect mentioned, explaining the choices made.

5.1 Entrepreneurial mindset

It is difficult to state that Elon Musk is not an entrepreneur, considering his achievements. In addition it can be said that he smartly exploited as many opportunities as he could to obtain success. It is natural to have big dreams, therefore, his intent to realize his vision can be understood and supported by any ambitious person. He had an entrepreneurial streak from a young age and later a passion to create, change and innovate. We found enough evidence to prove this aspect of the subject.

5.2 Companies and their financial problems

Musk was able to do something remarkable; creating all his companies from scratch. The most astonishing point is that, all of them served a purpose in his vision and are a step toward the future. This is because devising such a complex plan in which so many ambiguities play a role is objectively hard. This factor conspired against him, since the products his latter companies were developing were difficult to sell (rockets, luxury cars). For example, Tesla sold electric cars. America, at that time, was so addicted to oil cars that it was hard for Musk to bring them out of “old ways” towards modern, environment friendly ways.

There were times when he was even up against governments and their policies in order to achieve company goals. [28] His initial companies (Paypal and Zip2) were stepping stones towards Musk’s eventual goals, that is, laying down the foundation for his vision about saving human kind.

5.3 Eccentric Ideas

Elon Musk was ”famous for his futuristic gambles” [16] Some of his ideas, scheduled results and promises were unrealistic, showing an aspect of his personality that makes him look like a child wanting to appear successful and innovative.

Finally, both the teams came to the following reconciliation: the subject was indeed an innovative entrepreneur and visionary. He had a passion to help and save humanity. He had change-inducing ideas and he knew how to implement them. However, some of his ideas were too “out there” for his time, too unfeasible to be accepted or implemented. His promises were at times far fetched and their fulfillment often delayed. This lead many of that era to believe he was a fraud, we however would not go as far as to call him that.

6 Conclusion

The reconciliation is required because, during our analysis of the scenario and data, we found out a consistent layer of ambiguity. This made the decision even more difficult because, in those cases where data were available, we had difficulties understanding whether or not they represent the truth. We found several documents stating how innovative and successful Elon Musk’s companies were. Conversely, we also found out several articles speculating he was a fraud. We would like to clarify the nature of said ambiguity: it is due to different overlapping points of view, sharing some considerations and differing by some others. In conclusion, we could say that he took a lot of risks to be an innovator; even in the case we did not know whether or not Elon Musk was an innovator or a fraud, he took risks and among those, there is also the risk of being deemed “a fraud”. However, all his choices had a high degree of uncertainty: he had no intel on the probabilities about failure and success of his plan, but he did it anyway. We dug deeply into the battle argumentation, we could not however cover every aspect of it. For instance, there was a huge debate about the effective limitation of green house gases through the employment of electric cars. It is, however, unclear whether the CO₂ emissions would have been reduced by the usage of electric engines or the production of engines themselves would’ve released the same (or more) carbon dioxide. Another aspect that could not be covered in detail was the subject’s open “war” against artificial intelligence and his company Neuralink. [10] On one hand, he was promoting open and friendly AI that is democratized and available to all in order to avoid the dangers it would present if it was accumulated in the hands of a few. On the other hand, his company Neuralink, with the short-term goal to treat brain diseases, eventually aimed to develop a brain-computer interface. This would allow humans to connect to

the internet at a 'biological level'. Experts of that time revealed the dangers of this radical interface, raising questions like "If this interface is successful, who would be connecting back with us?". These contradictions in Musk's claims and in his own two different ideas (or beliefs) need to be explored in further detail in order to perfectly understand the subject. Furthermore, the limited duration of the battle did not permit enough time to discuss his giving and charitable side; all the non-profit projects he's involved with and how he's doing his part in changing lives of the people in remote settlements of underdeveloped countries.

We would like to conclude with a thought, synthesizing Elon Musk's attitude; a famous sentence stating: "When life gives you lemons, make lemonade". From our point of view, in case Musk had some he used them, in case he had none he took some.

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